REMARKS

Applicants and the undersigned are most grateful for the time and effort accorded the instant application by the Examiner.

Claims 1 - 56 were pending in the instant application at the time of the outstanding Office Action. Of these claims, Claims 1, 20, and 39 are independent claims; the remaining claims are dependent claims. All of the Claims currently stand rejected under 35 U.S.C. § 102(e) as being anticipated by Sen et al., U.S. Patent No. 6,845,389 B1. The Office is respectfully requested to reconsider the rejections presented in the outstanding Office Action in light of the following remarks.

As indicated in the Remarks previously presented in the Applicants' Amendment dated June 30, 2005, which is hereby incorporated by reference, the presently claimed invention relates to the integration of heterogeneous processing systems. More specifically, the invention "[i]nvolves the introduction of a negotiation phase into the resource enlistment or registration process wherein the resource component and coordinator component request and respond with indicators showing the quality of service that each supports, thus jointly establishing at runtime a quality of service to be supported for the resource and coordinator pairing. The qualities of service may include commit phase support and recovery support." (Abstract) In broad terms, at least one embodiment of the present invention can be summarized as two steps. In the first step a resource requests and is provided a coordinator's quality of service information (hereinafter "QoS") to determine whether to offer itself for pairing with that coordinator. Thus, the

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first step is an information seeking process enabling the resource to make an informed decision whether to offer itself to the coordinator as a resource. The second step, broadly speaking in one embodiment, is dependent upon the outcome of the first. If the resource described above finds the QoS information it received from a coordinator to be favorable the resource will then offer itself to the coordinator to form a pairing. Upon receiving such an offer a coordinator will request and receive the resource's QoS information so that it too can decide whether to form a pairing. If a resource and a coordinator both agree to form a pair one is then formed. In this way it can be seen that the present invention is one in which "[n]either the coordinator nor the resource has sole responsibility for determining whether a particular resource can be coordinated by a particular coordinator. The decision is made by 'mutual agreement.'" (Page 8) The independent Claims of the present invention more accurately reflect the steps simplified above and, most importantly, these steps are not taught in the prior art currently being applied under section 102(e). As the Examiner is assuredly aware since anticipation cannot occur where a prior art reference fails to disclose each and every limitation set forth in a claim under examination, the present Claims should be allowed.

Sen is directed towards providing multi-user communication over a network. In the embodiment cited by the Office, (Col. 5-6), it appears that a first player sends a communication invite request to a second player, which includes the first player's QoS information. In response, the second player determines its QoS requirements and whether the resources are available for the second player at its "access network". (Col. 6, lines 19-22) The second player's QoS information is then transmitted to the first player's

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network. (Col. 6, lines 14-18) Upon receipt of the second player's QoS requirements the first player's network determines whether it has resources available as required by the second player's QoS information and if so the resources are reserved and the players admitted. (Col. 6, lines 23-29) (*Abstract* "The resource availability in access networks of the first and second users according to the second user's QoS requirements is determined, and resources in the respective access networks of the first and second users are then reserved in response to resources being available to achieve the second user's QoS requirements.") After the resources capable of supporting the QoS requirements of the second player are reserved in both networks an acknowledgement is sent from the first player to the second player indicating a completed QoS provisioning. (Col. 6, lines 33-34)

Unlike Sen, in the present invention each member of a possible coordinated pair, i.e., the resource and the coordinator, requests the other's QoS information for their own use in determining whether a pair will be established. In Sen a first user sends its request/invite to a second user; the second user's QoS then sets the requirements for communication for both users. In other words Sen fails to provide for a process of mutual agreement, because ultimately in the Sen invention only one user's QoS information serves as the basis for a subsequently established communication between users. Requests for QoS information are not made by each user in Sen and, moreover, QoS information in response to such requests is not used by each user in order to make an independent decision whether to establish a paring. Therefore, Sen fails to teach, disclose, or suggest the present invention.

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The following remarks will focus upon the elements as set forth in independent Claim 1; however, it should be readily understood the rationale supporting the remarks is equally applicable to the other independent and dependent Claims having the same or similar limitations. Claim 1 provides numerous elements not taught or suggested in Sen. Claim 1 recites, *inter alia*, "[r]equesting by a first one of a resource component and coordinator pair a first indicator indicating a first quality of service supported by a second one of said pair; responding by said second one of said pair with said first indicator; receiving by said first one of said pair said first indicator...". Unlike the present invention, in Sen a first user simply sends its QoS to a second user who in turn determines the QoS to be used for both users and whether such resources are available. Thus, Sen fails to teach a first user requesting QoS information and, naturally, if such information is not requested no equivalent responding and receiving as indicated in Claim 1 can be said to be taught by Sen.

The step recited next in Claim 1 provides, "**[r]esponsive** to said first indicator, **determining** by said first one of said pair whether said first quality of service is acceptable... ." (emphasis added) This element is not taught or suggested since the first user in Sen sends its QoS to a second user who uses its QoS to determine the QoS pairing and resource reservation for both users. In contrast to Sen, the claimed limitation indicates, generally speaking, the first of the pair makes a determination, based on its request and receipt of information from the second of the pair, whether it is acceptable for the first of the pair to offer itself to the second for coordination. No such process is disclosed in Sen by any user. Sen fails to disclose an informed offer-making

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determination in response to information acquired via a request for the information of another user. The interrelation as indicated by "responsive to" and the decision making ability as indicated by "determining" fails to be contemplated by Sen.

The same Claim also recites, "[r]esponsive to said determining, offering by said first one of said pair to permit one of joining in coordination with said second one of said pair and not joining in coordination with said second of said pair...". (Claim 1) First, there is no response to a determination of whether information received from a request is acceptable by a first user in Sen as indicated above. Additionally, the claimed offering is made by the first pair for coordination based on this determination. Sen never discloses such an offering for coordination as claimed. The Office indicates that such an offering is met by Sen at Column 6, lines 11-13. The cited section appears to disclose an invite message that is sent from player one to player two. This invite message is not responsive to a determination by the first user, wherein said determination is made in response to the receipt of information from a second pair after the first of the pair made a specific request therefor. Simply sending a party invite containing QoS information fails to meet the element for which it has been cited by the Office.

Claim 1 proceeds with the following, "[r]esponsive to said offering by said first one of said pair to permit joining in coordination with said second one of said pair, requesting by said second one of said pair a second indicator indicating a second quality of service acceptable to said first one of said pair...". Since there is no such offering in Sen, it simply follows that, likewise, there can be no request in response to said offering as presently claimed. Moreover, the second user in Sen never makes a request for the

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QoS information of the first user. Sen, therefore, fails to teach yet another element of Claim 1.

Next Claim 1 provides, "[r]esponding by said first one of said pair with said second indicator; receiving by said second one of said pair said second indicator; responsive to said second indicator, determining by said second one of said pair to permit joining in coordination with said first one of said pair; and responsive to determining by said second one of said pair to permit joining in coordination with said first one of said pair, determining a quality of service provision for said coordination." Since an indicator is provided in response to a request for such and Sen discloses no such request and/or response, Sen fails to meet this limitation. A determination is made by the second one of said pair based on the received indicator. It is logically impossible for such a determination to be made in Sen since no response to a such a request is made; moreover, Sen simply never contemplates such a determination in a system primarily based on the second user's requirements. Finally, a determination of QoS provisions is made responsive to the determination to permit joining which is never made in Sen; therefore, this has also not been met by the Sen reference.

The overview provided above of the elements of Claim 1 is not meant to be a substitute interpretation of the actual Claim language provided in the Claim, which is read in light of the specification, but rather the same is simply a means to convey the fundamental shortcomings of the applied art as a reference anticipating the present invention. Sen's failings stem from the simply fact that Sen and the present invention are different. The Applicant respectfully requests the Examiner reconsider his present

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rejections in light of these remarks and conclude that such rejections should be withdrawn and the present invention immediately allowed.

In response to the Examiner's response to the Applicants' arguments, the Applicants would like to remark as follows. The Examiner indicates querying a user for specific quality of service information as argued is not recited in the rejected claims and that the claims broadly recite transmitting a QoS indicator in response to a request made by one of the users, which requires nothing more than a response message containing an indication of quality of service supported by the responding user. As explained above, Claim 1 states, *inter alia*, "**[r]equesting** by a first one of a resource component and coordinator pair **a first indicator indicating a first quality of service** supported by a second one of said pair...". (emphasis added) This is a specific request for quality of support information. Applicant disagrees that this specific request can be met by any "response message containing an indication of quality of service supported by the responding user." (Office Action P. 5) Even if one were to argue that Sen teaches QoS information being transmitted in response to a "participation request message" the same does not meet or teach the Claim's specific **requesting a first indicator indicating a first quality of service.**

Although the following may be irrelevant in view of the above regarding the allowability of the present claims, Applicants would also like to note its disagreement with the Examiner's statement, "Such a negotiating message from the second user further served to invoke a quality of service enabling mechanism (i.e. requested a quality of service indicator), allowing the first user to respond with its own quality of service data

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(i.e. indicator) as claimed." (Office Action P. 5) As explained above and clearly summarized in Sen's Abstract, a second user in Sen never requests the first user's QoS information since the same is transmitted with the first user's invite. Additionally, Sen's second user's QoS information serves as the resource allocation information for both users, thus the second user has no need for such a request.

Lastly, it should also be pointed out that there is nothing in Sen to teach or suggest the integration of processing systems that are heterogeneous or runtime QoS pairings in which all qualities of service need not be enabled thereby permitting the use of smaller, less resource-consuming runtimes.

In view of the foregoing, it is respectfully submitted that Claims 1, 20, and 39 fully distinguish over the applied art and are thus allowable. By virtue of dependence from what is believed to be allowable independent Claims 1, 20, and 39, is respectfully submitted that Claims 2-19, 21-38, and 40-56 are also presently allowable.

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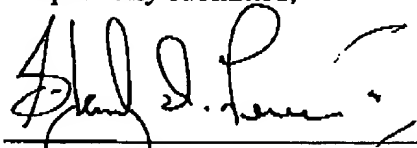
In summary, it is respectfully submitted that the instant application, including Claims 1-56, is in condition for allowance. Notice to the effect is hereby earnestly solicited. If there are any further issues in this application, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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